A NOVEL METHOD OF DETECTING AND ISOLATING PRION PROTEIN AND VARIANTS THEREOF, AND NOVEL METHODS OF DIAGNOSING AND TREATING PRION DISEASES

Abstract of the Disclosure

[0071] The present invention provides for a novel method of detecting the prion protein and variants thereof which utilizes specific amino acid binding sequences. Specifically, the present invention provides a method of detecting prion proteins, as well as isolating prion proteins, using an agent that binds to the amino acid sequence Gln-Pro-His of prion proteins. Further provided by the present invention is a method of diagnosing prion diseases in a subject using an agent that binds to the amino acid sequence Gln-Pro-His of prion proteins. Also provided are methods of treating and preventing prion diseases in a subject by administering an agent that binds to the amino acid sequence Gln-Pro-His of prion proteins. Finally, a method of inhibiting the dissemination of prion diseases through ingestion or exposure to liquid or solid substances by treating of the liquid or solid substance with biotin is provided herein.